



Dart Aerospace Ltd.  
1270 Aberdeen St  
Hawkesbury, ON  
K6A 1K7  
Canada

Tel (613) 632-5200  
Fax 613 632-5246

PRELIMINARY ISSUE

D5853-045

Job Sheet 207001



POSITIVE RECALL  
EFFECTIVE 2002.14 AUTH *ll*  
RELEASED DATE

Part No: D5853-045

Part Name: Lid Rim Weldment



Part Weight: 0 lbs

Job Created: 2/14/20

Due Date: 3/13/20

Type: Stock

Status: New

Priority: Medium

Job Tracking No:

Created By: Linda Lacelle

Description:

Note: DWG D5853 Rev A IPP Rev. A 2020.01.30 New issue DP Verify DD

Ship Via:

POSITIVE RECALL  
EFFECTIVE \_\_\_\_\_ AUTH \_\_\_\_\_  
RELEASED \_\_\_\_\_ DATE \_\_\_\_\_

### Bill of Materials

### Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup	Run	Workcenter / Supplier	Lead Time	
100	Large Fab - Basket - 1	12 pcs	3/13/20	3/13/20	0.00	2.40	Large Fab - 1		
							Large Fab - 10		
							Large Fab - 2		
							Large Fab - 3		
							Large Fab - 4		
							Large Fab - 5		
							Large Fab - 6		
							Large Fab - 7		<i>ll</i>
							Large Fab - 8		
							Large Fab - 9		
							Large Fab - 11 (Various)		<i>ll</i>
							Large Fab - 12		
150	QC 9	12 pcs	3/13/20	3/13/20	0.00	0.00	QC 9 - 10		
							QC 9 - 18		
							QC 9 - 24		
							QC 9 - 43		<i>043</i>
							QC 9 - 50		<i>43</i>
							QC 9 - 9		<i>9-89</i>
160	QC 5	12 pcs	3/13/20	3/13/20	0.00	0.00	QC 5 - 10		
							QC 5 - 12		
							QC 5 - 17		
							QC 5 - 18		
							QC 5 - 19		
							QC 5 - 22		
							QC 5 - 24		
							QC 5 - 3		<i>043</i>
							QC 5 - 43		<i>43</i>
							QC 5 - 49		<i>9-89</i>
							QC 5 - 51		
							QC 5 - 58		
							QC 5 - 68		



Container No: S256942



Part: D5853 - 045

Job No: 207001

Serial No/Batch: S256942

Revision: A

Inspector:

Exp Date:

Instructions:

Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury, ON K6A 1K7  
CANADA  
TEL.: 1 613 632-5200  
Email: sales@dartaero.com  
www.dartaerospace.com

Date: 02/20/20

				QC 5 - 9	
				QC 5 - 50	
				QC 5 - 30	
				QC 5 - 40	
				QC 5 - 61	
				QC 5 - 81	
170 Packaging 3-1 - Stock - B4B 12 pcs	3/13/20	0.00 0.00	Packaging 3 - 1 - B4B		
			Packaging 3 - 2 - B4B		
			Packaging 3 - 3 - B4B		
			Packaging 3 - 4 - B4B		
			Packaging 3 - 5 - B4B		
			Packaging 3 - 6 - B4B		
			Packaging 3 - 7 - B4B		
			Packaging 3 - 8 - B4B		
			Packaging 3 - 9 - B4B		
			Packaging 3 - 10 - B4B		
			Packaging 3 - 11 - B4B		
			Packaging 3 - 12 - B4B		
			Packaging 3 - 13 - B4B		
			Packaging 3 - 14 - B4B		
			Packaging 3 - 15 - B4B		
			Packaging 3 - 16 - B4B		
			Packaging 3 - 17 - B4B		
			Packaging 3 - 18 - B4B		DAS
			Packaging 3 - 19 - B4B		43
			Packaging 3 - 20 - B4B		9-98
			Packaging 3 - 21 - B4B		
			Packaging 3 - 22 - B4B		
			Packaging 3 - 23 - B4B		
			Packaging 3 - 24 - B4B		
			Packaging 3 - 25 - B4B		
			Packaging 3 - 26 - B4B		
			Packaging 3 - 27 - B4B		
			Packaging 3 - 28 - B4B		
			Packaging 3 - 29 - B4B		
			Packaging 3 - 30 - B4B		
			Packaging 3 - 31 - B4B		
			Packaging 3 - 32 - B4B		
			Packaging 3 - 33 - B4B		
			Packaging 3 - 34 - B4B		
			Packaging 3 - 35 - B4B		
			Packaging 3 - 36 - B4B		
			Packaging 3 - 37 - B4B		
180 QC 21 - SA	12 pcs	3/13/20	0.00 0.00	QC 21 - SA - 21	
				QC 21 - SA - 70	DAS
				QC 21 - SA - 53	21
					MAR 03 2020

MAR 03 2020

Part Op 100 - 1-Cut D5853-5 as per drawing. 2- Drill holes with DT10654 as per D5853-5 dwg 3-Deburr. 4-Weld as per drawing.  
 Descriptions: 5-Back drill support as per drawing note 9.  
 150 - (QC9- inspect visual per Q81004- Fusion Welds)  
 160 - QC8- inspect part completeness to step on W/O  
 170 - identify as per dwg & Stock Location: \_\_\_\_\_ As per drawing, see note 6.  
 180 - QC21- Final Inspection - Work Order Release

# Job BOM

Part / Item	Component Name	Quantity	Operation	Container
M4130NTS0.750W.035	4130 Square Tube 0.750 X 0.035W	22.8000 ft (1.9 ea)	100-Large Fab - Basket - 1	S250794
15853-9		24 (2 ea)		S259573

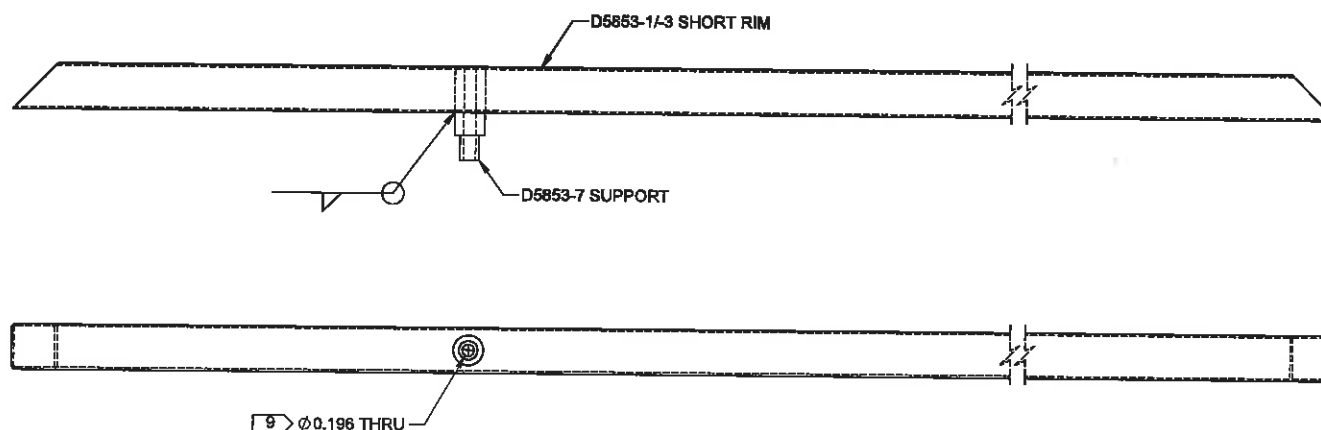
DAS  
10  
9-89

2020.02.20

Job Allocations				
Operation	Component Part	Required	Inventory	Allocated
100-Large Fab - Basket - 1	M4130NTS0.750W.035	23	609	0
Part Specifications				
Specifications could not be found.				

Plex 2/14/20 1:45 PM dart.lacelle.linda

QTY -041	QTY -043	P/N	DESCRIPTION
X		D5853-041	BASKET RIM WELDMENT
	X	D5853-043	BASKET RIM WELDMENT
1		D5853-1	SHORT RIM
	1	D5853-3	SHORT RIM
1	1	D5853-7	SUPPORT



**D5853-041 BASKET RIM WELDMENT**  
**D5853-043 BASKET RIM WELDMENT**

PRELIMINARY ISSUE

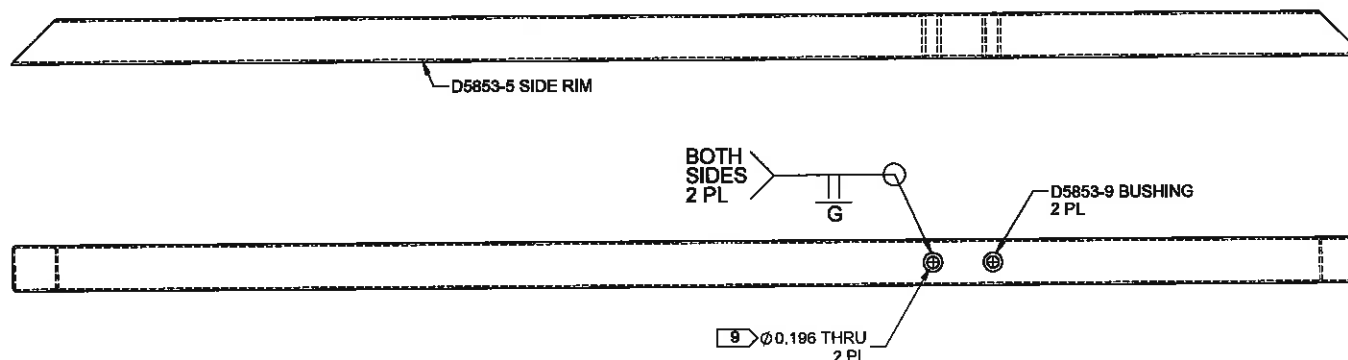
- NOTES:**
- 1) MATERIAL: N/A
  - 2) FINISH: NONE
  - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
  - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
  - 5) BREAK SHARP EDGES: N/A
  - 6) IDENTIFICATION: IDENTIFY WITH DART P/N AND SERIAL NUMBER PER DART QSI 044 6.6
  - 7) WEIGHT: -041: 0.65 lbs  
-043: 0.73 lbs
  - 8) WELD PER DART QSI 004
  - 9) DRILL THRU SUPPORT AND TUBE AFTER WELDING.

PRELIMINARY ISSUE

REV.	DESCRIPTION	BY	DATE
A	NEW ISSUE	ZF	20.01.24
DESIGN	ZF		
DRAWN	ZF		
CHECKED	KPT		
MFG. APPR.	DD		
APPROVED			
DE APPR.			
DATE	20.01.24		

**DART AEROSPACE LTD**  
HAWKESBURY, ONTARIO, CANADA  
**D5853**  
**BASKET RIM**  
REV. A2  
SHEET 1 OF 6  
SCALE  
NTS  
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QTY -046	P/N	DESCRIPTION
X	D5853-046	LID RIM WELDMENT
1	D5853-5	SIDE RIM
2	D5853-9	BUSHING



**D5853-046 LID RIM WELDMENT**

**NOTES:**

- 1) MATERIAL: N/A
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N AND SERIAL NUMBER PER DART QSI 044 6.6
- 7) WEIGHT: 0.81 lbs
- 8) WELD PER DART QSI 004
- 9) DRILL THRU BUSHINGS AFTER WELDING.

PRELIMINARY ISSUE

DESIGN	ZF	<b>DART AEROSPACE LTD</b>	
DRAWN	ZF	HAWKESBURY, ONTARIO, CANADA	
CHECKED	KPT	DRAWING NO.	REV. A2
MFG. APPR.	DD	<b>D5853</b>	SHEET 2 OF 8
APPROVED		TITLE	SCALE
DE APPR.		<b>BASKET RIM</b>	NTS
DATE	20.01.24	<small>COPYRIGHT © 2020 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE UNDERSTANDING THAT IT IS NOT TO BE USED FOR ANY PURPOSES OR COPIED OR REPRODUCED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	

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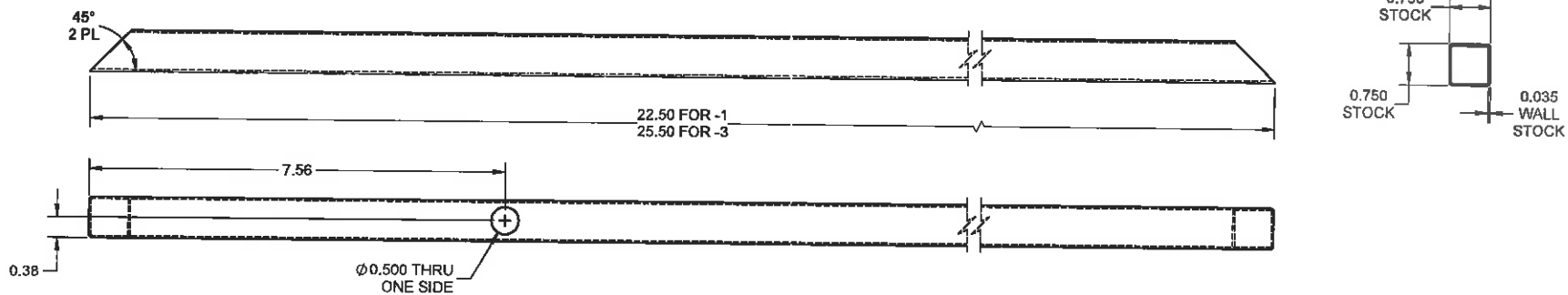
1

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**D5853-1 SHORT RIM**  
**D5853-3 SHORT RIM**

PRELIMINARY ISSUE

**NOTES:**

- 1) MATERIAL: AISI 4130N STEEL SQUARE TUBING, 3/4 X 0.035 WALL  
PER MIL-T-6736 OR AMS 6371/6370/6361/6362/6373/6374  
REF DART SPEC M4130N-TS
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: -1: 0.59 lbs  
-3: 0.88 lbs

PRELIMINARY ISSUE

DESIGN	ZF	<b>DART AEROSPACE LTD</b>	
DRAWN	ZF	HAWKESBURY, ONTARIO, CANADA	
CHECKED	KPT	DRAWING NO.	REV. A2
MFG. APPR.	DD	<b>D5853</b>	SHEET 3 OF 8
APPROVED		TITLE	SCALE
DE APPR.		<b>BASKET RIM</b>	NTS
DATE	20.01.24	COPYRIGHT © 2020 BY DART AEROSPACE LTD	
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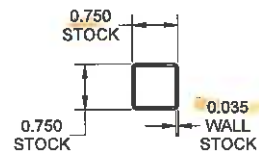
22.50

15.31

1.000

Ø 0.313 THRU  
BOTH SIDES  
2 PL

0.38



**D5853-5 SIDE RIM**

**NOTES:**

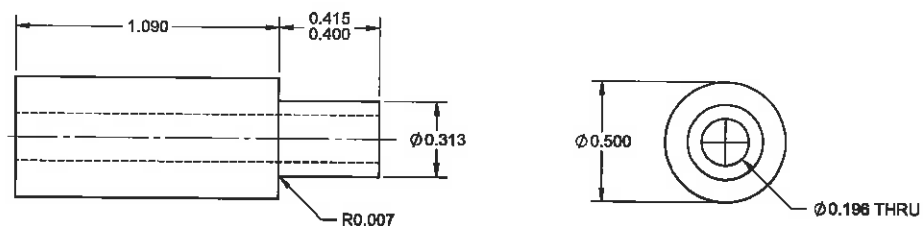
- 1) MATERIAL: AISI 4130N STEEL SQUARE TUBING, 3/4 X 0.035 WALL  
PER MIL-T-6738 OR AMS 6371/6370/6361/6362/6373/6374  
REF DART SPEC M4130N-TS
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.59 lbs

PRELIMINARY ISSUE

PRELIMINARY ISSUE

DESIGN	ZF	<b>DART AEROSPACE LTD</b>	
DRAWN	ZF	HAWKESBURY, ONTARIO, CANADA	
CHECKED	KPT	DRAWING NO.	REV. A2
MFG. APPR.	DD	<b>D5853</b>	SHEET 4 OF 8
APPROVED		TITLE	SCALE
DE APPR.		<b>BASKET RIM</b>	NTS
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8 7 6 5 4 3 2 1



**D5853-7 SUPPORT**  
(DERIVED FROM AERO DESIGN P/N 70422-05)

**NOTES:**

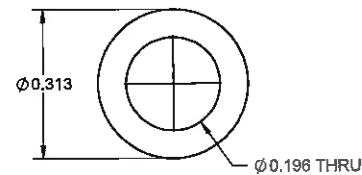
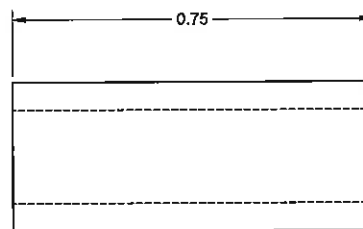
- 1) MATERIAL: AISI 304/316 STAINLESS STEEL ROUND BAR  
PER ASTM A276 OR ASTM A479  
REF DART SPEC M304R
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.08 lbs

**PRELIMINARY ISSUE**

**PRELIMINARY ISSUE**

DESIGN	ZF	<b>DART AEROSPACE LTD</b>	
DRAWN	ZF	HAWKESBURY, ONTARIO, CANADA	
CHECKED	KPT	DRAWING NO.	REV. A2
MFG. APPR.	DD	<b>D5853</b>	SHEET 5 OF 6
APPROVED		TITLE	SCALE
DE APPR.		<b>BASKET RIM</b>	NTS
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**D5853-9 BUSHING**  
(DERIVED FROM AERO DESIGN P/N 70422-04)

**NOTES:**

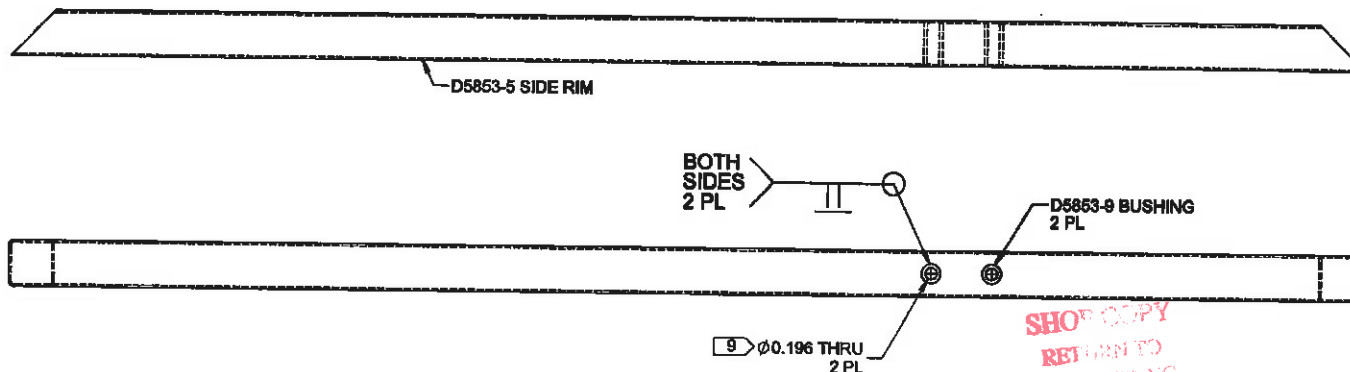
- 1) MATERIAL: AISI 304/316 STAINLESS STEEL SEAMLESS ROUND TUBE, 5/16 OD X 0.058 WALL  
PER ASTM A213 OR ASME SA213 OR ASTM A269  
REF DART SPEC M304TR  
OR  
AISI 304/316 STAINLESS STEEL ROUND BAR  
PER ASTM A276 OR ASTM A479  
REF DART SPEC M304R
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.01 lbs

PRELIMINARY ISSUE

DESIGN	ZF	<b>DART AEROSPACE LTD</b>	
DRAWN	ZF	HAWKESBURY, ONTARIO, CANADA	
CHECKED	KPT	DRAWING NO.	REV. A2
MFG. APPR.	DD	<b>D5853</b>	SHEET 6 OF 6
APPROVED		TITLE	SCALE
DE APPR.		<b>BASKET RIM</b>	NTS
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QTY -045	P/N	DESCRIPTION
X	D5853-045	LID RIM WELDMENT
1	D5853-5	SIDE RIM
2	D5853-9	BUSHING



**D5853-045 LID RIM WELDMENT**

SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 207001

115  
20-02-20

UNDER REVIEW  
URF 2020-522 20.02.14 (NO)

NOTES:  
1) MATERIAL: N/A  
2) FINISH: NONE  
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED  
4) UNITS: INCHES UNLESS OTHERWISE NOTED  
5) BREAK SHARP EDGES: N/A  
6) IDENTIFICATION: IDENTIFY PER DART QSI 044  
7) WEIGHT: 0.61 lbs.  
8) WELD PER DART QSI 004. GRIND WELDS FLUSH IF REQUIRED.  
9) DRILL THRU BUSHINGS AFTER WELDING.

RELEASED  
2020 FEB 18 NQ

DESIGN	ZF	DART AEROSPACE LTD	REV. A
DRAWN	ZF	HAWKESBURY, ONTARIO, CANADA	SHEET 2 OF 6
CHECKED	KPT	DRAWING NO. D5853	SCALE
MFG. APPR.	DD	TITLE	NTS
APPROVED	NO	BASKET RIM	
DE APPR.	CP		
DATE	20.01.24		

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Dart Aerospace Ltd.  
1270 Aberdeen St  
Hawkesbury, ON  
K6A 1K7  
Canada

Tel (613) 632-5200

# PURCHASE ORDER

## POHB045594



**Supplier:** FAC001-VU  
Factory Steel  
14020 Oakland Ave.  
Detroit, MI 48203 USA  
Phone: 313 883 6300  
Fax: 313 883 4883

**PO No:** POHB045594

**PO Date:** 1/16/20

**Due Date:** 2/4/20

**Purchase Order**

**Revision:**

**Revision Date:**

**Ship-To Contact:** Phone:

JAN 16 2020

**Ship To:** 1270 Aberdeen Street  
Hawkesbury  
ON  
K6A 1K7 Canada  
Phone: 613-632-5200

**Via:** Ground

**Pynt Terms:** Net 30

**Freight Terms:**

**Special Comments:**

Items													
Line Item	Job	Part	Drawing	Supplier Part No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (USD)	Extended Price
1		M4130NTS1.000W.065			4130 Square Tube 0.750 X 0.035W : MATERIAL: AISI 4130N STEEL SQUARE TUBING PER ONE OF THE FOLLOWING SPEC'S: MIL-T-6736, AMS 6371, 6390, 6361, 6362, 6373 OR 6374	Firmed	-	2/4/20	600 ft	0 ft	600 ft	\$7.25/ft	\$4,350.00
										600 ft			
2		M4130NTS1.000W.065			4130 Square Tube 1.000" X 1.000" X 0.065"W : MATERIAL: AISI 4130N STEEL SQUARE TUBING PER ONE OF THE FOLLOWING SPEC'S: MIL-T-6736, AMS 6371, 6390, 6361, 6362, 6373 OR 6374	Firmed	-	2/4/20	160 ft	0 ft	160 ft	\$11.70/ft	\$1,872.00
										171 ft			
Grand Total:												\$6,222.00	



Dart Aerospace Ltd.  
1270 Aberdeen St  
Hawkesbury, ON  
K6A 1K7  
Canada

Tel (613) 632-5200

**PURCHASE ORDER**  
**POHB045594**



#### Order Notes

##### Procurement Quality Clauses

A005 right of entry

A012 chemical and physical test report

A016 personnel qualification

A017 raw material identification (as applicable). No Raw Metals from China or Soviet Bloc Countries. (DFARS)

A026 certification of material conformance

A041 quality management system

A042 dart notification by supplier

A043 retention of quality documents

A048 counterfeit parts avoidance, detection, mitigation and disposition program.

A049 supplier awareness.

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit [www.dartaerospace.com](http://www.dartaerospace.com) for further explanation.

Plex 1/16/20 11:38 AM Dart.Lavoie.Chantal

# PACKING LIST

No. 67371

PG 1 OF 1

PL

FACTORY STEEL & METAL SUPPLY 14020 OAKLAND AVENUE DETROIT, MI 48203  (313)883-6300 PHONE (313)883-4883 FAX		CUSTOMER PO POHB045594 CUSTOMER JOB		BUYER CHANTEL LAVOIE Tel (613) 632-3336 Fax (613) 632-4443		SHIP DATE 01/21/2020 SHIP VIA ****TRUCK****	
SOLD TO DART AEROSPACE 1270 ABERDEEN STREET HAWKESBURY, ON K6A 1K7		SALES ORDER 60306		ORDER DATE 01/16/2020		SALES REP MICK HALON	
		SHIP TO DART AEROSPACE 1270 ABERDEEN STREET HAWKESBURY, ON K6A 1K7		SHIP INST CALL WHEN READY PRO#		RESALE # 59-2958719	
				TERMS NET 30 DAYS		CARRIER TRUCK BLIND Y/N N FOB DETROIT	

LINE	QUANTITY	DESCRIPTION	WIDTH	LENGTH	WEIGHT
1	609.917 FT	4130N CD SMLSS SQ TUBE 3/4" X .035W  Tag Mill Ref # Heat 153513 023679 616506	Pcs Length 26 20'/24' RL	20'/24' RL  Feet 609.917	207.554  Weight 207.554
2	171.333 FT	4130W CD SMLSS SQ TUBE 1" X .065W  Tag Mill Ref # Heat 153514 072143 072067859	Pcs Length 7 22'/23' RL	22'/23' RL  Feet 171.333	141.606  Weight 141.606
3	1 PCS	PACKING CHARGES  MTRS (CIRCLE) FAX SHIPMENT INVOICE ALL  DATE: _____ INITIAL: _____			

TOTAL WT 349 LBS		RECEIVED BY - SIGNATURE		RECEIVED BY - PRINTED NAME		DATE RECEIVED	

SO

M4130NTS0.750W.035

616506



DESIGN PH	DRAWN BY PH	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED [Signature]	APPROVED [Signature]	DRAWING NO. M4130N-TS	REV. A SHEET 1 OF 1
DATE 05.02.09		TITLE 4130N SQUARE TUBING	SCALE NTS
A	05.02.09	NEW ISSUE	

PURCHASE MATERIAL:

AISI 4130N STEEL SQUARE TUBING PER ONE OF  
THE FOLLOWING SPEC'S: MIL-T-6736, AMS 6371,  
6360, 6361, 6362, 6373 OR 6374

DAS  
82  
9-89

PART NUMBER:

M4130N-TS | A.AAA | W | .TTT |

WHERE A.AAA = WIDTH IN INCHES  
TTT = WALL THICKNESS IN INCHES

EXAMPLE: 0.50" X 0.035" WALL = M4130N-TS0.500W.035

05-03-05 [Signature]

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**PLYMOUTH TUBE CO.**

1200 East 12th Street, Streator, Illinois 61354

Phone: (815) 677-1616 Fax: (815) 672-7125

TRUST YOUR SOURCE AND GET NO SUBSTITUTION



# PRODUCT CERTIFICATION

SALES ORDER - LINE / RLS

175629 - 1 / 0

SHIP TO

Factory Steel & Metal Supply C  
14020 Oakland Avenue  
Detroit, MI 48203  
USA

WORK ORDER 023679

HEAT NUMBER 616506

MELT SOURCE Böhler Steel & Tube-Germany

PCS/HEAT

0

CUSTOMER P.O. 3887	CUSTOMER PART SQ-N34035	QUANTITY	LADING NO	CERT ID / REV /	CERT DATE								
<b>PART DESCRIPTION</b> SHSQ0750035J300 ***** Square OD ***** Side1: 0.7500 Max:0.7600 Min:0.7400 Side2: 0.7500 Max:0.7600 Min:0.7400 Wall: 0.0360 Max:0.0380 Min:0.0320 Length: 12.00 Spec: ASTM A-450 Beamless Aircraft Grade: 4130 Anneal: Cond N													
<b>CERTIFICATION REQUIREMENTS</b> FAR BAA (FAR 52.225-5 Trade Agreements Act Supplies), DFARS 252.225-7001 By America Act & Bal. of Payments Program FAR TAA (FAR 52.225-5 Trade Agreements Act), (Paragraph 1.4.5) This material was Eddy Current tested and conforms to the requirements of ASTM A-450. The Grain size is determined and reported by the raw material supplier in accordance to ASTM E-112. This raw material was magnetic particle inspected by the raw material supplier in accordance to AMS 7842 and/or ASTM E-1444, and rated as Frequency and Severity to AMS 2301, latest revision. Yield is determined by using the 0.2% offset method in accordance to specifications - AMS-T 6736B, 6360P & 6371L. Material produced in accordance to ASTM A-519-17 and MIL-T 6738B. This material meets Plymouth ProMoly specifications. Jominy results: J(5/16")=45 J(8/16")=38													
<b>Chemical Analysis</b>													
C	Mn	P	S	Si	Al	Cr	Mo	Ni	Pb	Cu	V	Ti	Sn
.310	.58	.011	.002	.230	.036	.87	.18	.12	.001	.16	.002	.002	.010
<b>Physical Properties</b>													
Freq.	Severity	Grain Size											
.020	.015	9											
<b>Mechanical Properties</b>													
<b>TEST</b>	<b>UNITS</b>	<b>TESTS</b>	<b>HIGH</b>	<b>LOW</b>	<b>AVERAGE</b>	<b>STD-DEV</b>							
Tensile	Psi	6	126660	125480	126065	482							
Yield	Psi	6	120930	119880	120387	374							
Elongation	%	6	21	20	20	1							
Rockwell	Rc	6	25	25	25	0							
<b>TEST</b>	<b>RESULT</b>												
Decarb/OTI	Pass												
Total ID/OD decarb	Pass												

I certify that the results are true and correct copy of the records prepared and maintained by Plymouth Tube Company, Streator in compliance with the requirements of the cited specification. Chemistry is as reported by the Steel supplier. This test report cannot be reproduced or distributed except in full without the written permission of Plymouth Tube.

*Jamie Dumasoff*  
Quality Assurance





**PLYMOUTH TUBE CO.**

1200 East 12th Street, Detroit, MI 48203  
Phone (313) 475-4716 Fax (313) 475-4713

THAT YOUR SOURCE ACCEPT NO SUBSTITUTION



# PRODUCT CERTIFICATION

SALES ORDER - LINE / RLS

175529 - 1 / 0

SHIP TO

Factory Steel & Metal Supply C  
14020 Oakland Avenue  
Detroit, MI 48203  
USA

WORK ORDER 023879

PCS/HEAT 0

HEAT NUMBER 616506

MELT SOURCE Bender Steel & Tube-Germany

CUSTOMER P.O. 3887	CUSTOMER PART SQ-N34035	QUANTITY	LADING NO	CERT ID / REV /	CERT DATE
PART DESCRIPTION SHSQ0750035J300					
Additional Specification(s)					
<u>TEST</u> Brinell	<u>UNITS</u> Brinell	<u>TESTS</u> 6	<u>HIGH</u> 253	<u>LOW</u> 253	<u>AVERAGE</u> 253
<u>STD-DEV</u> 0					
<p>This test report data is for the heat Chemistry Stated above.</p> <p>The material in this test report is:</p> <ol style="list-style-type: none"> <li>1) Drawn in the USA</li> <li>2) Free from Polybrominated Biphenyls (PBB), Polybrominated Diphenyl Ethers (PBDE), and Mercury contamination.</li> <li>3) No ETA compliant.</li> </ol> <p>End of Certification</p>					

I certify that the results are a true and correct copy of the records prepared and maintained by Plymouth Tube Company, created in compliance with the requirements of the cited specification. Chemistry is as reported by the Steel supplier. This test report cannot be reproduced or distributed except in full without the written permission of Plymouth Tube.

*Janis D. Bessett*  
Quality Assurance

# MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M4130NTS 0.750W .035 PO / BATCH NO.: POMB 045594  
 DATE: JAN 27 2020 5250794

MATERIAL CERT REC'D: YES  
 QUANTITY RECEIVED: 609 PL  
 QUANTITY INSPECTED: 609 PL  
 QUANTITY REJECTED: 0

THICKNESS ORDERED: .750 W .035  
 THICKNESS RECEIVED: .750 W .035  
 SHEET SIZE ORDERED: —  
 SHEET SIZE RECEIVED: —

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y (N)	
CORRECT FINISH	(Y) N	
CORROSION	Y (N)	
CORRECT GRAIN DIRECTION	(Y) N	
CORRECT MATERIAL PER M-DRAWING	(Y) N	MIL-T-6736
CORRECT THICKNESS	(Y) N	
PHOTO REQUIRED	Y (N)	
CORRECT REF # TO LINK CERT	(Y) N	616506
CORRECT MATERIAL IDENTIFICATION	(Y) N	
CORRECT M# ON THE MATERIAL	(Y) N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y (Y)	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y (N)	

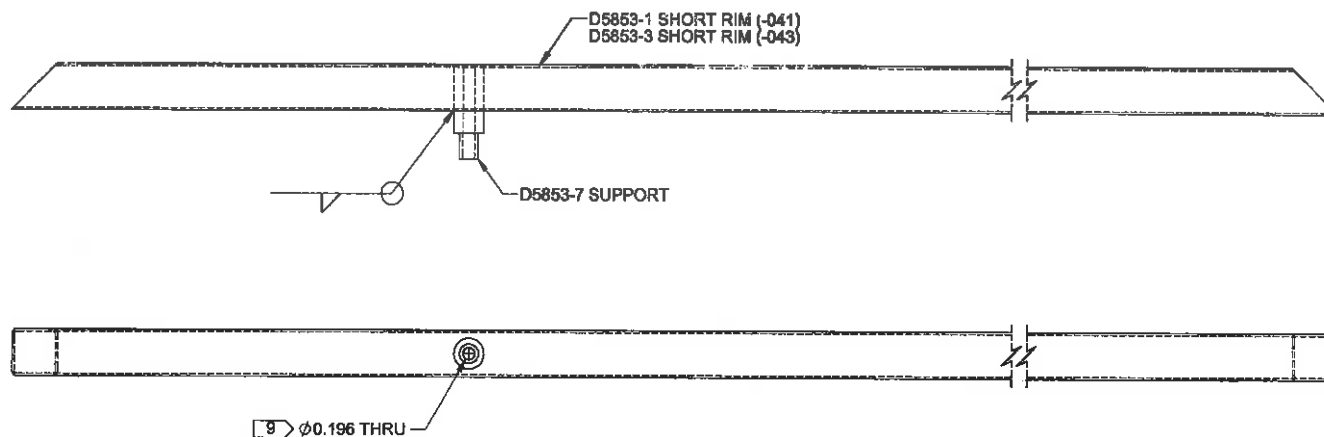
CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

*testers located in the Quality Office*

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)	
INSPECTED BY: _____	DAS	SIGNED OFF BY: _____	
DATE: <u>JAN 27 2020</u>	<u>32</u> 0.89	DATE: _____	

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

QTY -041	QTY -043	P/N	DESCRIPTION
X		D5853-041	BASKET RIM WELDMENT
	X	D5853-043	BASKET RIM WELDMENT
		D5853-1	SHORT RIM
		D5853-3	SHORT RIM
		D5853-7	SUPPORT



**D5853-041 BASKET RIM WELDMENT**  
**D5853-043 BASKET RIM WELDMENT**

# NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: IDENTIFY PER DART QSI 044
- 7) WEIGHT: -041: 0.85 lbs  
-043: 0.73 lbs
- 8) WELD PER DART QSI 004
- 9) DRILL THRU SUPPORT AND TUBE AFTER WELDING.

**RELEASED**

2020 FEB 18 W/D  
ECN 2020-521

UNDER REVIEW  
URF 2020-522 20.02.14 (NO)

REV.	DESCRIPTION	BY	DATE
A	NEW ISSUE	ZF	20.01.24
DESIGN	ZF		
DRAWN	ZF		
CHECKED	KPT		
MFG. APPR.	DD		
APPROVED	NO		
DE APPR.	CP		
DATE	20.01.24		

**DART AEROSPACE LTD**  
HAWKESBURY, ONTARIO, CANADA

DRAWING NO.

**D5853**

TITLE

**BASKET RIM**

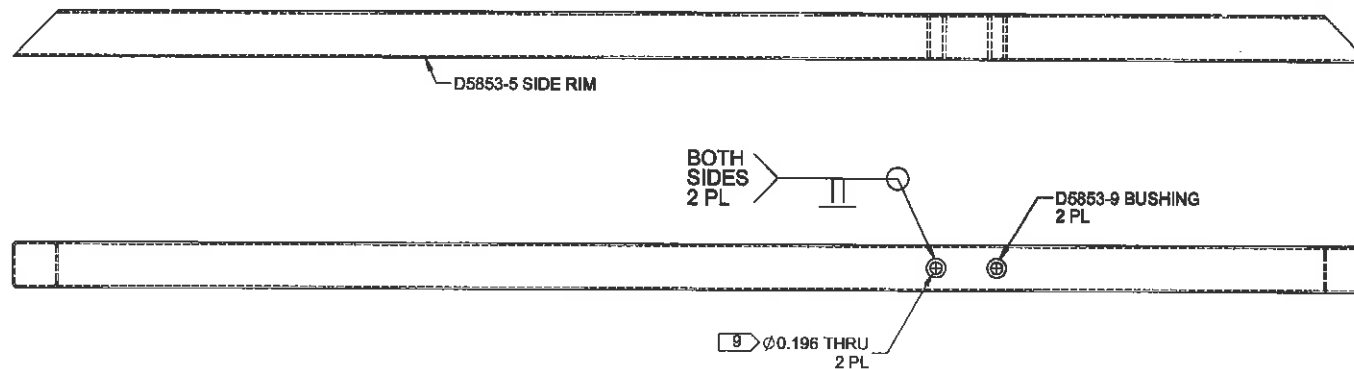
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APPROVED

REV. A  
SHEET 1 OF 6  
SCALE  
NTS

QTY -045	P/N	DESCRIPTION
Y	D5853-045	LID RIM WELDMENT
1	D5853-5	SIDE RIM
2	D5853-9	BUSHING



# **D5853-045 LID RIM WELDMENT**

UNDER REVIEW  
URF 2020-522 20.02.14 (NO)

- NOTES:
- 1) MATERIAL: N/A
  - 2) FINISH: NONE
  - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
  - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
  - 5) BREAK SHARP EDGES: N/A
  - 6) IDENTIFICATION: IDENTIFY PER DART QSI 044
  - 7) WEIGHT: 0.61 lbs.
  - 8) WELD PER DART QSI 004. GRIND WELDS FLUSH IF REQUIRED.
  - 9) DRILL THRU BUSHINGS AFTER WELDING.

**RELEASED**  
2020 FEB 18 *NG*

APPROVED

DESIGN	ZF	<b>DART AEROSPACE LTD</b>	
DRAWN	ZF	HAWKESBURY, ONTARIO, CANADA	
CHECKED	KPT	DRAWING NO.	REV. A
MFG. APPR.	DD	<b>D5853</b>	SHEET 2 OF 6
APPROVED	NO	TITLE	SCALE
DE APPR.	CP	<b>BASKET RIM</b>	NTS
DATE	20.01.24	COPYRIGHT © 2020 BY DART AEROSPACE LTD	
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8

7

6

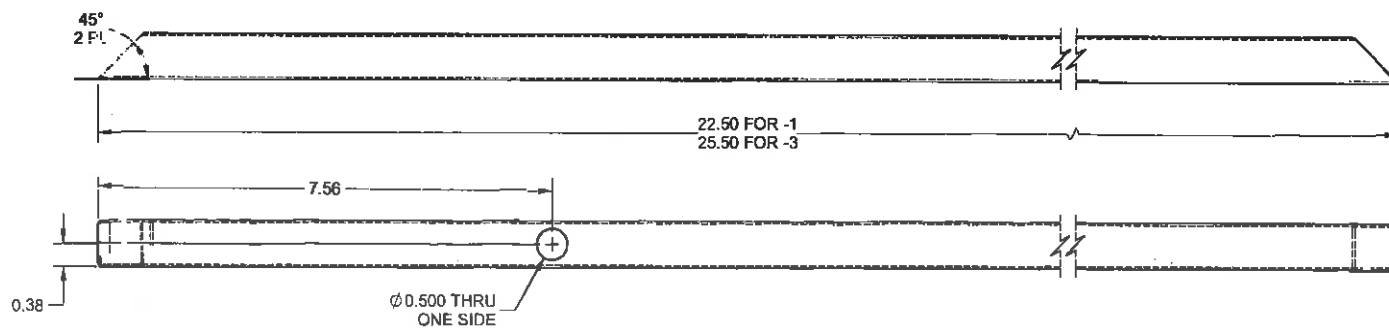
5

4

3

2

1



**D5853-1 SHORT RIM**  
**D5853-3 SHORT RIM**

UNDER REVIEW

URF 2020-522 20.02.14 (NO)

**NOTES:**

- 1) MATERIAL: AISI 4130N STEEL SQUARE TUBING, 3/4 X 0.035 WALL  
PER MIL-T-6736 OR AMS 6371/6360/6361/6362/6373/6374  
REF DART SPEC M4130N-TS
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: -1: 0.59 lbs  
-3: 0.66 lbs

**RELEASED**

2020 FEB 18 *Wd*

APPROVED

DESIGN ZF  
 DRAWN ZF  
 CHECKED KPT  
 MFG. APPR. DD  
 APPROVED NO  
 DE APPR. CP  
 DATE 20.01.24

**DART AEROSPACE LTD**  
 HAWKESBURY, ONTARIO, CANADA

DRAWING NO.

**D5853**

TITLE

**BASKET RIM**

REV. A

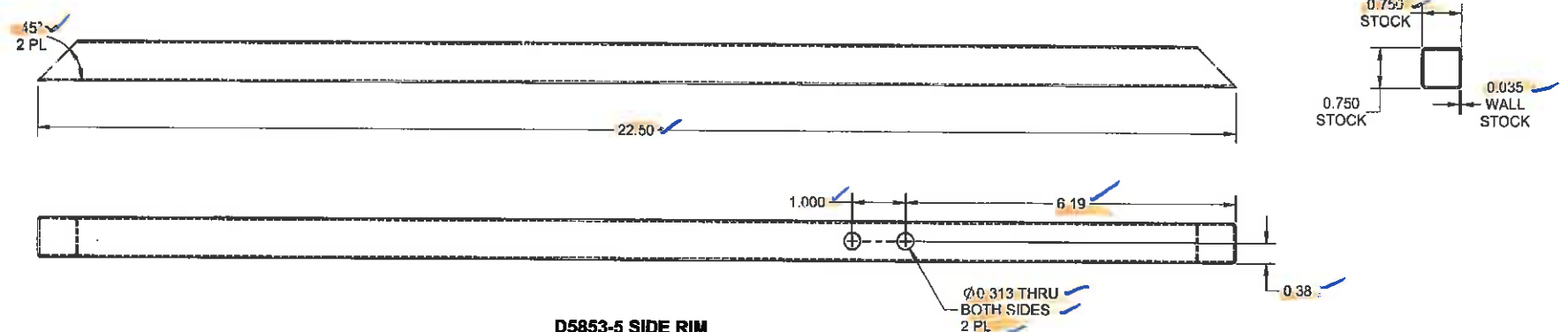
SHEET 3 OF 8

SCALE

NTS

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8 7 6 5 4 3 2 1



**D5853-5 SIDE RIM**

UNDER REVIEW  
URF 2020-522 20.02.14 (NO)

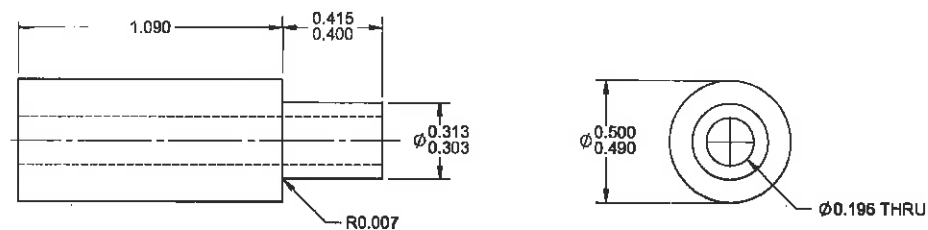
- NOTES:**
- 1) MATERIAL: AISI 4130N STEEL SQUARE TUBING, 3/4 X 0.035 WALL  
PER MIL-T-6738 OR AMS 6371/6360/6361/6362/6373/6374  
REF DART SPEC M4130N-TS
  - 2) FINISH: NONE
  - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
  - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
  - 5) BREAK SHARP EDGES: 0.005 TO 0.010
  - 6) IDENTIFICATION: NONE
  - 7) WEIGHT: 0.59 lbs

**RELEASED**  
2020 FEB 18 NO

APPROVED

DESIGN	ZF	<b>DART AEROSPACE LTD</b>	
DRAWN	ZF	HAWKESBURY, ONTARIO, CANADA	
CHECKED	KPT	DRAWING NO.	REV. A
MFG. APPR.	DD	<b>D5853</b>	SHEET 4 OF 6
APPROVED	NO	TITLE	SCALE
DE APPR.	CP	<b>BASKET RIM</b>	NTS
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8 7 6 5 4 3 2 1



**D5853-7 SUPPORT**  
(DERIVED FROM AERO DESIGN P/N 70422-05)

UNDER REVIEW

URF 2020-522 20.02.14 (NO)

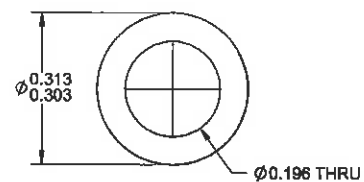
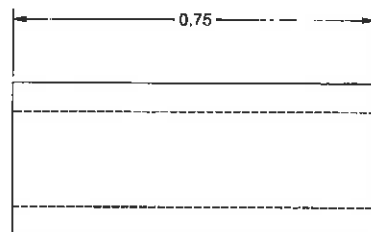
**NOTES:**

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL ROUND BAR  
PER ASTM A276 OR ASTM A479  
REF DART SPEC M304R
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.06 lbs

**RELEASED**  
2020 FEB 18 WQ

APPROVED

DESIGN	ZF	<b>DART AEROSPACE LTD</b>	
DRAWN	ZF	HAWKESBURY, ONTARIO, CANADA	
CHECKED	KPT	DRAWING NO.	REV. A
MFG. APPR.	DD	<b>D5853</b>	SHEET 5 OF 6
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**D5853-0 BUSHING**  
(DERIVED FROM AERO DESIGN P/N 70422-04)

**NOTES:**

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL ROUND BAR  
PER ASTM A276 OR ASTM A479  
REF DART SPEC M304R
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.01 lbs

UNDER REVIEW

URF 2020-522 20.02.14 (NO)

**RELEASED**

2020 FEB 18 *who*

APPROVED

DESIGN	ZF	<b>DART AEROSPACE LTD</b>	
DRAWN	ZF	HAWKESBURY, ONTARIO, CANADA	
CHECKED	KPT	DRAWING NO.	REV. A
MFG. APPR.	DD	<b>D5853</b>	SHEET 6 OF 6
APPROVED	NO	TITLE	SCALE
DE APPR.	CP	<b>BASKET RIM</b>	NTS
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# ENGINEERING CHANGE NOTICE

## DART AEROSPACE LTD

Date:	2020.02.14	Job No.:	Aero2019	ADR Yes/No:	N	ADR Date:		ECN #:	2020 521
Product No.:	D350-1080 baskets			Created By:	NO	Approved By:	<i>af</i>		
Product Name:	Quick Release Cargo Baskets			Checked By:					

### Reason for Change:

D350-1080 Baskets Limited Release #1

### Documents Released:

D5785 at Rev A, D5795 at Rev A, D5794 at Rev A, D5770 at Rev A, D5815 at Rev A, M304 TS at Rev E, M3003H22TP at Rev A, D5806 at Rev A, M302SW at Rev B  
D5759 at Rev A, D5805 at Rev A, D5803 at Rev A, D5853 at Rev A, D5765 at Rev A, D5760 at Rev A, D5761 at Rev A, D5802 at Rev A, D5808 at Rev A, D5810 at Rev A

IF APPLICABLE: NCR: \_\_\_\_\_ PAR: \_\_\_\_\_ CAR: \_\_\_\_\_ CIR: \_\_\_\_\_ URF: 2020-522

PAPERWORK UPDATE



PARTS MUST COMPLY



PREVIOUS PARTS SATISFACTORY



#	Quality Assurance / Customer Support Actions	Reqd	Resp	Notes	Complete
1	Notify Previous Customers	N			
2	Notify Airbus	N			
3	Notify Leonardo	N			
4	Manufacturing Licensing Agreement Update	N			

#	Engineering Actions	Reqd	Resp	Notes	Complete
5	Required Documents/ Drawings/Item ID's Under Review (URF)	Y	NO	ALL RELEASED PARTS PLACED UNDER REVIEW	<i>met 20.02.18</i>
6	Update Master Document List (MDL)	N		NO MDL/STC FOR THESE PARTS AT THIS TIME	
7	Update Document Record (DR)	N			
8	Update Product Compatibility Matrix	N			
9	Notify TC / FAA of Change (eg. ICA, 8110-3)	N			
10					

#	Document Control Actions	Reqd	Resp	Notes	Complete
11	Move / Update Electronic Files / Design Journal	Y	MG		<i>met 20.02.18</i>
12	Update Product Specification Files (Bluefiles)	N			
13	Update Approved/Preliminary Dwg PDF Files	Y	MG		<i>met 20.02.18</i>
14	Update Product Development Summary (STC applications)	N			
15	Update QSI 02 / TC/FAA STC) and/or STC Approval List	N			
16	Create/Update Parts / STC Database	Y	MG		<i>met 20.02.18</i>
17	Update / Verify Authorized Release Certificate Database	N			
18	Create / Update Change Record Form / Item Card Database	N		NO TOP LEVELS AT THIS RELEASE	
19	Create / Update Packaging Process Plan (PPP)	N			
20	Red Decals required on Packaging Process Plan (PPP)?	N			
21	Update Controlled Supplier Documents (Qpulse) Database	Y	MG	<i>No dwgs at suppliers</i>	<i>met 20.02.18</i>
22	Update Grey Project Folder / Electronic Project Folder	N			
23	Update D-Part / M-Drawing / DSI / DEO Master Binders	Y	MG		<i>met 20.02.18</i>
24	Update "Royalty Paid to" attribute (Parts sold under Dart USA STC's)	N			
25					

### Description / Action:

Releasing first batch of D350-1080 basket drawing updates for production under Limited Release per QSI 040.

Place all parts under review. Engineering to sign off work orders for on risk production

No STC for these parts at this time

No nine digit BOMS/ROUTES/CHG#S for this release

Previous Parts Satisfactory for M Drawing updates. M Drawings not under Review

ECN Verified & Complete: \_\_\_\_\_

Date: \_\_\_\_\_